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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Timothy A. Ellis

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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 11/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/882,154

Applicant(s)

ELLIS ET AL.

Examiner

Dan Colilla

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 28-35 is/are rejected.
- 7) ☒ Claim(s) 26 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **30a** and **30b** (as mentioned on page 6, line 25 of the specification), **39** (as mentioned on page 8, line 32), **37'** (as mentioned on page 8, line 33). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: **91** (as shown in Figure 3). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 2-11 and 17-19 are objected to because of the following informalities:

In claims 2-11, applicant recites, "a sheet removal system" in the preamble of the claim while claim 1 is directed towards a method for separating. The preambles of the dependent claim should be directed towards the same invention as the parent claim.

In claims 10-11, "the holding area" has no proper antecedent basis in the claims.

In claim 17, "the front end corners" has no antecedent basis in the claims.

In claim 18, “the corners” has no antecedent basis in the claims.

In claim 19, “the base of the handler area” and “the top of the holding bin” each have no antecedent basis in the claims.

In claim 20, “the bottom front end” has no antecedent basis in the claim.

In claim 7, “the gas nozzles” has no antecedent basis in the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 28 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hillhouse.

With respect to claim 28, Hillhouse discloses an apparatus for separating slip sheets from printing plates including means for handling plates 44 and 53, means for holding discarded slip sheets 81 and a passage 54 and a conveyor 25 for directing slip sheets to the means for holding.

With respect to claim 33, passage 54 is a chute.

With respect to claim 34, passage 54 is shown in Figure 1 of Hillhouse to comprise a bottom plate, a top plate 34 and two sides (the cut away portions in the Figure).

With respect to claim 35, the front edge of the top plate 34 is slanted downward.

6. Claims 28 and 32 are rejected under 35 U.S.C. 102(a) as being anticipated by Ono et al.

With respect to claim 28, Ono et al. discloses an apparatus for separating slip sheets from plates including a means 106 for handling plates, means 132 for holding discarded slip sheets and means 134,136,141 for directing slip sheets from the handling area to the means 132 for holding.

With respect to claim 32, the means 106 for handling and the means for holding 132 are contained in a cart 200.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 10-13 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Angelbeck et al.

With respect to claim 1, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). Angelbeck et al. teaches the step of directing gas at an interface of a plate and slip sheet 19 as shown in Figure 2 of Angelbeck et al. It would have been obvious

Art Unit: 2854

to combine the teaching of Angelbeck et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 2, Hillhouse discloses a holding area 81.

With respect to claim 3, Hillhouse discloses nozzles 62 for directing gas.

With respect to claim 4, Hillhouse discloses air (col. 4, line 5) as the gas that is being directed through nozzle 62.

With respect to claim 5, the gas is at a suitable pressure for removing slip sheets and injecting air between slip sheets and plates since this is what the gas is used for.

With respect to claim 6, the optimal pressure at which the gas is used could have readily been determined by one of ordinary skill in the art through routine experimentation and appears to require no unobviousness.

With respect to claim 10, Hillhouse discloses passage 54 which is a chute.

With respect to claim 11, Hillhouse discloses front edge top plate 34 in passage 54 that is angled downward.

With respect to claim 12, Hillhouse discloses the apparatus for carrying out the method as recited in the above prior art rejection of claim 1.

With respect to claim 13, Angelbeck et al. teaches a fan nozzle 4.

With respect to claim 29, Hillhouse discloses the claimed apparatus as mentioned above except for the two side panels. Hillhouse discloses a bottom panel for supporting the plates in a handling area, but it is not clear if he discloses two side panels. However, Angelbeck et al. teaches an apparatus for removing slip sheets which includes a bottom panel and two side panels for supporting the plates in a handling area as shown in Figure 4 of Angelbeck et al.

With respect to claim 30, Figure 2 of Angelbeck et al. shows that the plates 1 are stored in a cassette 2 which includes a front wall. This wall and the side panels of the cassette 2 would form squared corners.

9. Claims 1, 7-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Schön et al.

With respect to claims 1 and 8, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). Schön et al. teaches the step of directing gas at an interface of a plate 9 and slip sheet 19 as shown in the Figure of Schön et al. It would have been obvious to combine the teaching of Schön et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 7, the gas is directed through a nozzle jet 13 (Schön et al., col. 5, lines 8-39). Although it appears that Schön et al. only discloses one air jet 13, the provision of a plurality of the same structure for providing the same function would have been obvious to one of ordinary skill in the art.

With respect to claim 12, the nozzle 13 disclosed by Schön et al. is a jet nozzle.

10. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Straayer et al.

With respect to claims 1 and 9, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). Straayer et al. teaches the step of directing pulsed air at an interface of a plate 26 and slip sheet 75 (Straayer et al., col. 8, lines 62-65). It would have been obvious to combine the teaching of Straayer et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse in view of Angelbeck et al. as applied to claims 29-30 above, and further in view of Walter et al.

Hillhouse discloses the claimed apparatus except for the tapering of the front corners. However, Walter et al. discloses a sheet feeding apparatus with a tapering of guide edges for feeding the side of sheets as shown in Figure 4 of Walter et al. This is well-known sheet feeding structure. It would have been obvious to combine this teaching with the apparatus disclosed by Hillhouse in view of Angelbeck et al. for the advantage for aligning the side edges of a sheet while it is fed forward and preventing jamming from occurring due to a misaligned sheet.

12. Claims 15, 19 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. as applied to claims 28 and 32 above, and further in view of Schön et al.

With respect to claim 15, Ono et al. discloses the claimed apparatus except for the gas nozzle. Ono et al. discloses an apparatus for separating slip sheets from plates including an area 208 for handling plates, and a bin 132 for holding discarded slip sheets. Ono et al. further

discloses a movable head 109 including a vacuum cup 124 and a cart 200. Schön et al. teaches a gas that is directed through a nozzle jet 13 to create a layer of gas between a slip sheet and a plate (Schön et al., col. 5, lines 8-39). It would have been obvious to combine the teaching of Schön et al. with the apparatus disclosed by Ono et al. for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 19, Ono et al. discloses an angled plate below the stack of plates 210 which forms a slanted upper surface of bin 132.

With respect to claim 21, although it is not explicitly recited, some portion of the cart 200 must be removable in order for the bin 132 to be emptied, and there does not appear to be any criticality in the placement of the removable part.

With respect to claims 22-24, although it appears that Schön et al. only discloses one air jet 13, the provision of a plurality of the same structure for providing the same function would have been obvious to one of ordinary skill in the art.

With respect to claim 25, the guide plates 146 form a chute.

13. Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. as applied to claims 28 and 32 above, and further in view of Angelbeck et al.

With respect to claim 15, Ono et al. discloses the claimed apparatus except for the gas nozzle. Ono et al. discloses an apparatus for separating slip sheets from plates including an area 208 for handling plates, and a bin 132 for holding discarded slip sheets. Ono et al. further discloses a movable head 109 including a vacuum cup 124 and a cart 200. Angelbeck et al. teaches a gas that is directed through a nozzle 4 to create a layer of gas between a slip sheet and a

Art Unit: 2854

plate as shown in Figure 2 of Angelbeck et al. It would have been obvious to combine the teaching of Angelbeck et al. with the apparatus disclosed by Ono et al. for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 23, the nozzle 4 is a fan nozzle.

14. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. as applied to claim 15 and 23 above, and further in view of Blake et al. (5,655,452).

With respect to claim 16, Ono et al. in view of Schön et al. discloses the claimed apparatus except for the two stacks of plates. However, Blake et al. teaches that it is known to use an apparatus for separating slip sheets from plates with two stacks 26 of slip sheets and plates as shown in Figure 1 of Blake et al. It would have been obvious to combine the teaching of Blake et al. with the apparatus disclosed by Ono et al. in view of Schön et al. for the flexibility of using different sized sheets with the apparatus.

With respect to claim 17, the cassette 24 disclosed by Blake et al. has squared corners as shown in Figure 5 of Blake et al.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. and Blake et al. as applied to claims 16-17 above, and further in view of Walter et al.

Ono et al. in view of Schön et al. and Blake et al. discloses the claimed apparatus except for the tapered edges. However, Walter et al. discloses a sheet feeding apparatus with a tapering

of guide edges for feeding the side of sheets as shown in Figure 4 of Walter et al. This is well-known sheet feeding structure. It would have been obvious to combine this teaching with the apparatus disclosed by Ono et al. in view of Schön et al. and Blake et al. for the advantage for aligning the side edges of a sheet while it is fed forward and preventing jamming from occurring due to a misaligned sheet.

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. as applied to claims 16-17 above, and further in view of Hillhouse.

Ono et al. in view of Schön et al. discloses the claimed apparatus except for the angled bottom. However, Hillhouse teaches a sheet collection area 54 that has a bottom curving to one side. It would have been obvious to combine the teaching of Hillhouse with the apparatus disclosed by Ono et al. in view of Schön et al. for the advantage of preventing the discarded slip sheets from piling up and jamming the plate handling area.

Allowable Subject Matter

17. Claims 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter:

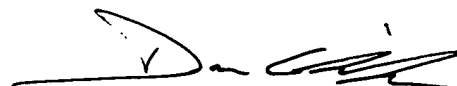
Claims 26-27 have been indicated as containing allowable subject matter because the prior art of record does not disclose or teach the entire combination of an apparatus for

Art Unit: 2854

separating slip sheets from plates including a cart, a bin, at least one gas nozzle for creating a layer of gas between plates and slip sheets, a chute and an angled baffle.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (703) 308-2259. The examiner can normally be reached M-F, 8:30-5:30. Faxes regarding this application can be sent to (703) 746-4405.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (703)305-6619. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Dan Colilla
Primary Examiner
Art Unit 2854

October 31, 2002